

It would be instructive to inquire into some of the immediate causes of the mistakes into which the Alchemists fell, but time forbids. We will consider merely the connection of alchemy with chemistry, and any benefit the nobler and truer science may have derived from the other.

Alchemy has been called the sickly and imaginative infancy through which modern chemistry had to pass before it attained its majority, that is, before it became a positive science. Though this in the main expresses the true relation between the two sciences, or rather between the two stages of the one science, it must not be forgotten that alchemy and chemistry—understanding by the former the futile attempts to make gold, and by the latter legitimate inquiry into the nature of different kinds of matter—existed side by side in the same age, often in the same person. While existing thus, however, only in spasmodic fits, unpursued with any regularity or intelligence, chemistry cannot be said to have existed as a well-defined science. Modern science can be said to date from three discoveries, (1) that of Copernicus, the effect of which was to expel the astrologers from the society of the astronomers, (2) that of Tourcellin and Pascal of the weight of the atmosphere, which was the foundation of physics, (3) that of Lavoisier, of oxygen. Before these three grand stages in the progress of science, the reign of astrology, magic, and alchemy was universal and almost uncontested.

Lastly, were the confused, uncertain gropings of the ancients amidst the overwhelming night of superstition and ignorance of any avail? If they themselves never reached the light, did they give to others an impetus in the right direction? We think they did, and in substantiation of this belief can quote no better authority than Lord Francis Bacon, who in his "*De Augmentis Scientiarum*" says; "Alchemy may be compared to the man who told his sons that he had left them gold, buried somewhere in his vineyard; where they by digging found no gold, but by turning up the mould about the roots of the vines, procured a plentiful vintage. So the search and endeavors to make gold have brought many useful inventions and instructive experiments to light."